

Lappeenranta teknillinen yliopisto  
School of Business and Management

Software Development Skills

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**LEARNING DIARY, MOBILE MODULE**

# **LEARNING DIARY**

## **Exercises**

**15.9.2025**

First exercise I made Android program where I enter two numbers and press button to add them together. I learned basic layout building and how to use OnClickListener. I made mistake and created three projects by accident because I forgot to select correct programming language. It was little frustrating but funny. I learned to pay more attention when creating android studio project. I tried simple UI and buttons, mostly testing how layout creation works. Video had old android studio interface and layout creation was bit more different, but I got everything working.

**17.9.2025**

Second exercise I made Android app with two activities. From home activity I can open Google search by button. I learned basic usage of Intent and how to switch between activities. Also understood better how activity lifecycle works and how to connect buttons with actions.

**18.9.2025**

Third exercise I made simple app with list on main screen. When I click list item it opens another activity showing image. I learned how RecyclerView works, how to handle clicks on items, and how to pass data to another activity. This exercise helped me understand UI navigation and simple data passing.

## **Project**

**20.9.2025**

I started main project and created new Android Studio project. After exercises with buttons and lists, I was thinking what practical app I can make. I decided to make shopping list app because I already know how to use lists, buttons and multiple activities. I checked how to use ViewModel and LiveData to share data between tabs. I made first layouts for dashboard,

shopping list and data tab. I tried RecyclerView first time, it was bit confusing but after some example I understand how adapter works.

### **21.9.2025**

I added shopping list items with name and quantity. I added delete button and tried to remove item from list. At first UI did not update when delete, I learned I need `notifyDataSetChanged()` in adapter. I also added favorite boolean and button, but it did not change view automatically, so I learned to update list in LiveData.

### **25.9.2025**

I started dashboard tab and favorites list. I added star button for favorite toggle and LiveData observer to update UI. I tried AlertDialog to change quantity when add favorite to shopping list. I also added total count textview in data tab. It was tricky to get favorite count updating, but now it works.

### **26.9.2025**

I added small borders and margins to list items to make UI nicer. I tried drawable with rounded corners and shadows. I tested many items and quantities, fixed some bugs in adapter and LiveData updates. I cleaned project and removed extra comments. I understand more how LiveData, ViewModel and RecyclerView works together and small UI details is important too.

